



*"Communications-  
Electronics Logistics  
Center of Choice into  
the 21st Century"*



# E-Collaborative Maintenance

Joint Technology Exchange Group  
Elizabeth City, VA 3/21/01

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# Project Overview

- Targets productivity increase
  - Reduce estimator hours expended locating hard-to-find parts
  - Reduce “no-bids” due due to failure to locate parts
- Implemented as a web site
- Use requires no user technology beyond a PC and a browser

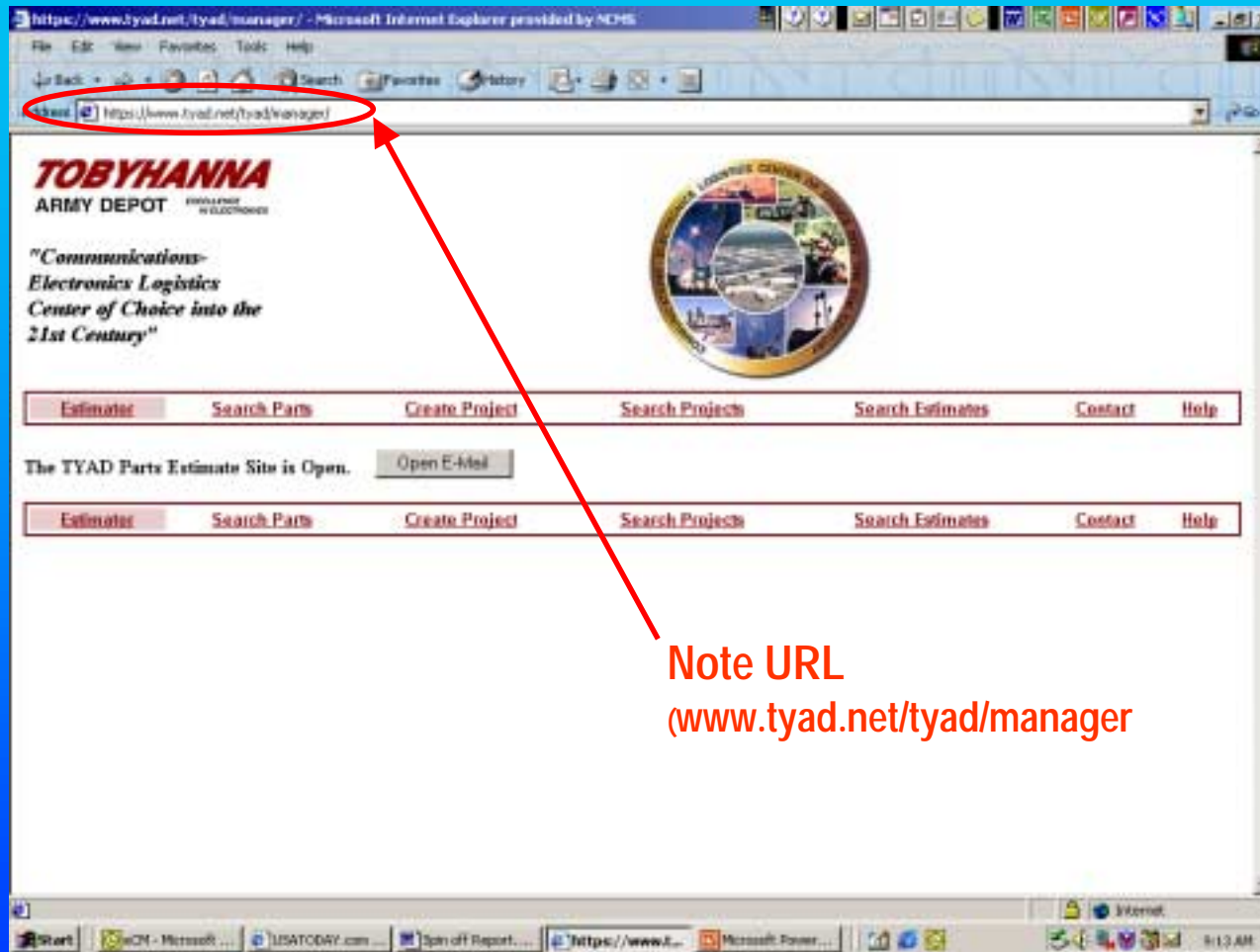
# The Project Concept

- Estimators (Tobyhanna personnel) create projects and enter list of parts needed – including a repository of supporting documents
- The fact of the creation of a new list of needed parts is published via a broadcast email to all suppliers in the contact database (open to any supplier that wishes to participate)
- Suppliers view open parts requests and enter budgetary estimates as appropriate
- Estimator is notified of estimate entry and retrieves estimates

# Potential Joint Service Use

- Depots with electronics responsibility can use with only minor tailoring
  - Avionics, communications
- Extensible to mechanical components but will need a Phase II project to develop database specifications
  - All services

# The Estimator Web Site Entry Screen



# The Project Search Screen

The screenshot shows a web browser window with the address bar displaying <https://www.tyad.net/tyad/Manager/SearchProjects.asp>. The page header includes the TOBYHANNA ARMY DEPOT logo and the tagline "Communications-Electronics Logistics Center of Choice into the 21st Century". Below the header is a navigation bar with links: Estimator, Search Parts, Create Project, Search Projects, Search Estimates, Contact, and Help. The main content area contains a search form with the following fields and options:

- Search** and **Reset** buttons.
- Project Number:** A text input field.
- Name:** Radio buttons for ☐ equals and ☐ contains, followed by a text input field.
- Created:** Radio buttons for ☐ on or before and ☒ on or after, followed by a date input field showing 3/9/2000.
- Closing:** Radio buttons for ☒ on or before and ☐ on or after, followed by a date input field showing 3/9/2001.
- Keywords:** A text input field with the instruction "(comma-delimited words and phrases)".

Below the search form is a second navigation bar with the same links as the first. The Windows taskbar at the bottom shows the Start button and several open applications, including Internet Explorer, USATODAY.com, and Microsoft PowerPoint.

# A Project Search Result

https://www.tyad.net/tyad/Manager/Search/ProjectResults.asp?cursorpos=1&listsize=20&where=+&

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History

Address tyad.net/tyad/Manager/Search/ProjectResults.asp?cursorpos=1&listsize=20&where=+&creation+date%3E%3D9%2F9%2F2000+and+close+date%3C%3D9%2F9%2F2000

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ARMY DEPOT

"Communications-Electronics Logistics Center of Choice into the 21st Century"

jackdow, estimator, 3/9/2001

Estimator Search Parts Create Project **Search Projects** Search Estimates Contact Help

Project Search: where creation date<=9/9/2000 and close date<=9/9/2001

Proj Name	Proj ID	Close Date	Create Date	Estimates
<a href="#">Seld radio</a>	1000	8/22/2001 2:09:00 PM	2/22/2001 2:09:00 PM	None
<a href="#">asplane radio</a>	1001	8/22/2001 2:08:00 PM	2/23/2001 2:08:00 PM	<a href="#">1 estimate</a>

Estimator Search Parts Create Project **Search Projects** Search Estimates Contact Help

Done

Start eCH - Microsoft... USA TODAY.com Spin off Report... https://www.t... Microsoft Power... 9:15 AM

# Drill Down to Project Detail

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jacholce, estimator, 3/9/2001

Estimator Search Parts Create Project Search Projects Search Estimates Contact Help

**Project 1001, airplane radio**

\* denotes required field.

\*Name:  \*Close Date:

Description:

Project Parts				
Part Name	Part Number	Estimates	Status	Action
<a href="#">circuit board11</a>	CB-23458	None	published	close <input type="button" value=""/>
<a href="#">circuit board12</a>	CB-23472	<a href="#">1 estimate</a>	published	close <input type="button" value=""/>
<a href="#">circuit board13</a>	CB-23477	None	published	close <input type="button" value=""/>
<a href="#">circuit board14</a>	CB-23478	None	published	close <input type="button" value=""/>

Add New Part Copy Existing Part

Publish All Apply Changes

Estimator Search Parts Create Project Search Projects Search Estimates Contact Help

Done

Start Internet

USATODAY.com Spin off Report... https://www.t... Microsoft Power...

9:15 AM



# The New Part Screen

https://www.tyad.net/tyad/Manager/NewPart.asp?proj\_id=1000&proj\_header=Project+1000,+field+

File Edit View Favorites Tools Help

Back Forward Stop Home Search Favorites History

Address: https://www.tyad.net/tyad/Manager/NewPart.asp?proj\_id=1000&proj\_header=Project+1000,+field+

History

View Search

3 Weeks Ago

2 Weeks Ago

Last Week

Today

altavista (www.altavista.com)

brackettson.usatoday (brackettson.usatoday.com)

cn.nyaircraft (cn.nyaircraft.com)

epc (www.epc.com)

enterprise (www.enterprise.com)

gospelcase (www.gospelcase.com)

intellcast (www.intellcast.com)

Ann Arbor PE Weather (www.annarborpeweather.com)

Ann Arbor PE Weather (www.annarborpeweather.com)

Ann Arbor PE Weather (www.annarborpeweather.com)

incadef (www.incadef.com)

members.tripod (members.tripod.com)

infogate (www.infogate.com)

My Computer

nyaircraft (www.nyaircraft.com)

nachar (www.nachar.org)

railroad (www.railroad.net)

trainweb (www.trainweb.org)

tyad (www.tyad.net)

usatoday (www.usatoday.com)

w3.access.gpo (w3.access.gpo.gov)

web.ukonline (web.ukonline.com)

zinet.demon (www.zinet.demon.nl)

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ARMY DEPOT

"Communications-Electronics Logistics Center of Choice into the 21st Century"

jachlee, estimator, 3/12/2001

Estimate Search Parts Create Project Search Projects Search Estimates Contact Help

Add New Part to Project 1000, field radio

\* denotes required field

\*Part Category: ELECTRONICS

\*Qty Needed: 1

\*Replacement Part Nbr:

\*OEM Part Nbr:

\*Replacement Part Name:

OEM Part Name:

Replacement Part Descr:

OEM Description:

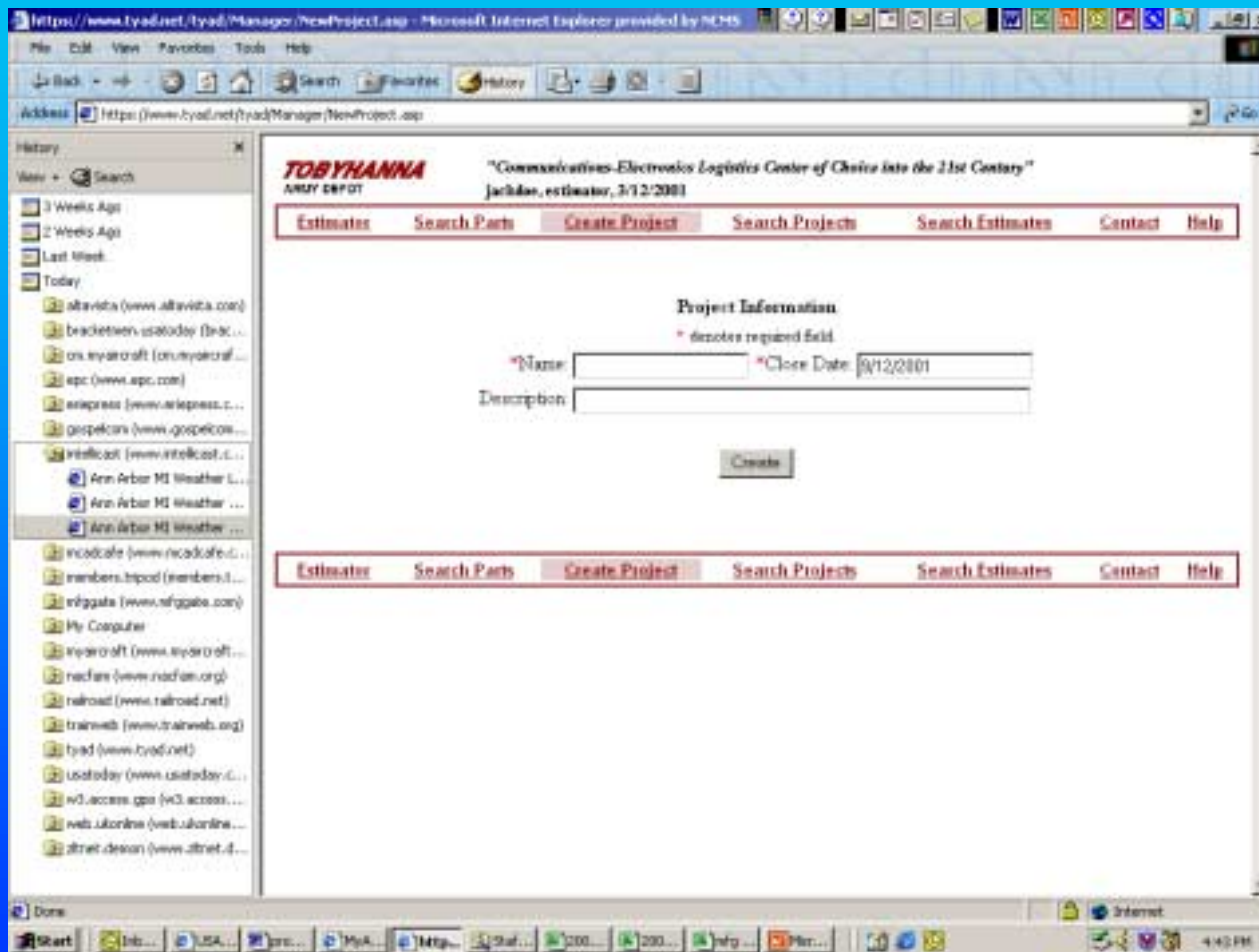
OEM Mfg:

Image File: Browse

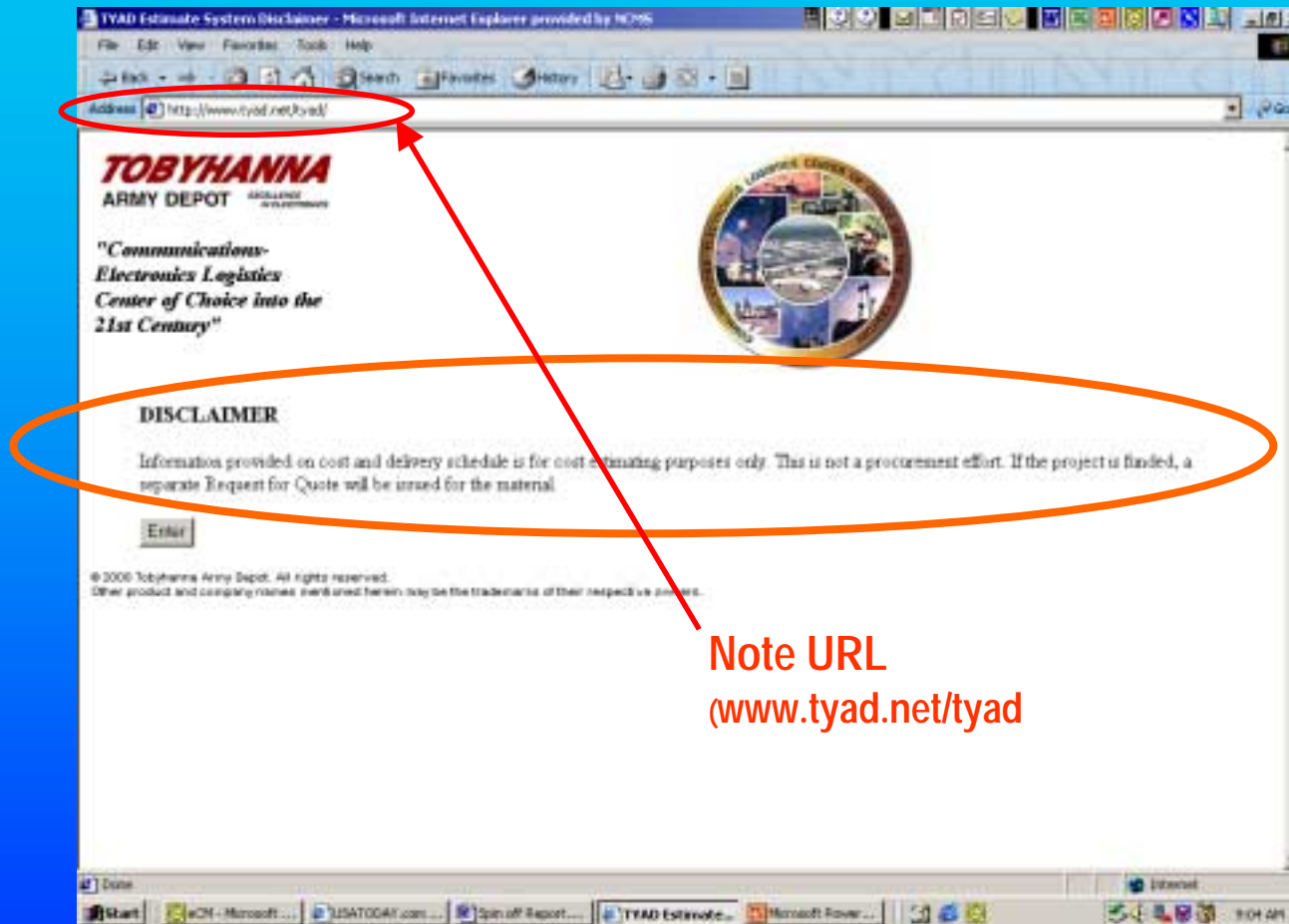
Add Part Project Detail

Estimate Search Parts Create Project Search Projects Search Estimates Contact Help

# The New Project Screen



# The Main Supplier Web Site Entry Screen



# The Supplier Entry Screen

Search  
Parts  
Menu



# Supplier Login Screen

The screenshot shows a web browser window with the address bar displaying <https://www.tyad.net/tyad/SearchEstimates.asp>. The page header includes the TOBYHANNA logo and the tagline "Communications-Electronics Logistics Center of Choice into the 21st Century". A navigation bar contains links for Home, Search Parts, Search Estimates, Login, Contact, and Help. The main content area features a "New Members" link and a "Current Members:" section with a login form. The login form includes fields for "User id" and "Password", a "Login" button, and a text prompt: "Enter your registered name to receive your User id and password at your registered e-mail address." Below this is a form with fields for "Last", "First", and "Middle" names, followed by an "Email" button. A second navigation bar is located at the bottom of the page.

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AVERY DEMPST

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not logged on

[Home](#) [Search Parts](#) [Search Estimates](#) [Login](#) [Contact](#) [Help](#)

[New Members](#)

Current Members:

User id:  Password:

Enter your registered name to receive your User id and password at your registered e-mail address.

Last:  First:  Middle:

[Home](#) [Search Parts](#) [Search Estimates](#) [Login](#) [Contact](#) [Help](#)

# New Supplier Login/Password Creation

https://www.tyad.net/tyad/newvendor.asp - Microsoft Internet Explorer provided by NCMIS

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites History

Address https://www.tyad.net/tyad/newvendor.asp

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ARMY DEPOT

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not logged on

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Home Search Parts Search Estimates **Login** Contact Help

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**Company Information**  
\* denotes required field.

\*Company name:

\*Address 1:  Address 2:

Division:  Plant:

\*City:  \*State/Prov:

\*Postal code:  \*Country: US

\*Phone:  Fax:

E-mail:

**User Information**  
\* denotes required field.

Status:

\*First name:  Middle name:

\*Last name:  \*User Logon:

\*E-mail:  Title:

\*Address 1:  Address 2:

\*City:  \*State/Prov:

\*Postal code:  \*Country: US

Done

Start MSN - Microsoft ... USATODAY.com ... Spin off Report... https://www.t... Microsoft Power...

Internet 9:10 AM



# The Search Parts Screen

The screenshot shows a web browser window with the address bar displaying <http://www.tyad.net/tyad/SearchParts.asp>. The page header includes the TOBYHANNA logo, the tagline "Communication/Electronics Logistics Center of Choice into the 21st Century", and a status "not logged on". A navigation bar contains links: Home, Search Parts (highlighted), Search Estimates, Login, Contact, and Help.

The search form includes the following fields and options:

- Buttons: Search, Reset (Default values retrieve all parts)
- Replacement Part Nbr:
- OEM Part Nbr:
- Name: ☐ equals ☐ contains
- Category:
- Sort by: ☐ close date ☐ part name
- Expiring: ☐ on or before ☐ on or after
- Keywords:
- Text below keywords: (comma-delimited words and phrases)

A second navigation bar is located at the bottom of the form area, identical to the top one.

The Windows taskbar at the bottom shows the Start button and several open applications: USATODAY.com, Spin off Report..., and Microsoft PowerPoint.

# A Part Search Result

http://www.tyad.net/tyad/SearchPartsResults.asp?cursorpos=1&listsize=20&searchclass=0&statusval=0

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites History

Address http://www.tyad.net/tyad/SearchPartsResults.asp?cursorpos=1&listsize=20&searchclass=0&statusval=0

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not logged on

Home Search Parts Search Estimates Login Contact Help

Part Search:

Replacement Part	Lot	Close Date	OEM Mfg	OEM Number	Qty Needed
<a href="#">circuit board11</a>	1001	8/22/2001		78789-99-P	3
<a href="#">circuit board12</a>	1001	8/22/2001		998B	3
<a href="#">circuit board13</a>	1001	8/22/2001		998C	3
<a href="#">circuit board14</a>	1001	8/22/2001		998C	3
<a href="#">circuit board1</a>	1000	8/22/2001		90223	3
<a href="#">circuit board2</a>	1000	8/22/2001		90224	3
<a href="#">circuit board3</a>	1000	8/22/2001		90225	3
<a href="#">SCSI 1</a>	1000	8/22/2001		90346	3
<a href="#">SCSI 2</a>	1000	8/22/2001		49772-E	3
<a href="#">SCSI 3</a>	1000	8/22/2001		978X-73	3
<a href="#">SCSI 4</a>	1000	8/22/2001		998D	3
<a href="#">SCSI 5</a>	1000	8/22/2001		999XF	3
<a href="#">SCSI 6</a>	1000	8/22/2001		42987X-PL9	3

Home Search Parts Search Estimates Login Contact Help

Done

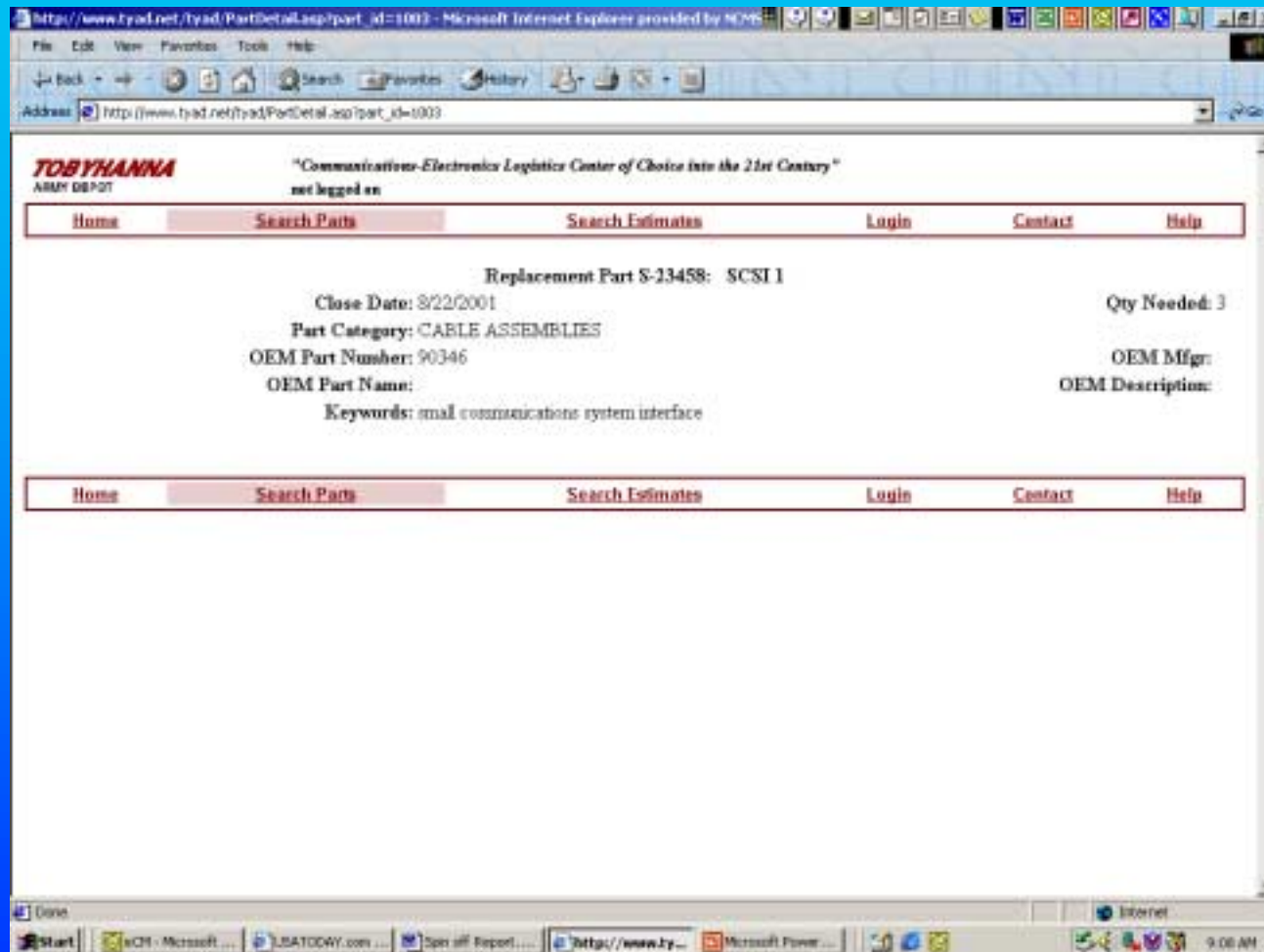
Start Internet

MSN - Microsoft ... USATODAY.com ... Spin off Report... http://www.ty... Microsoft Power...

9:07 AM



# Drill Down to a Specific Part



# The Estimate Search Screen

The screenshot shows a web browser window with the address bar displaying <https://www.tyadnet.tyad/SearchEstimates.asp>. The page header includes the TOBYHANNA ARMY DEPOT logo and the tagline "Communications-Electronics Logistics Center of Choice into the 21st Century". Below the header is a navigation bar with links: Estimator, Search Parts, Create Project, Search Projects, Search Estimates (highlighted), Contact, and Help. The main search area contains several input fields: Estimate Number, Project (dropdown menu set to ALL), Company (dropdown menu set to ALL), Submitted (radio buttons for "on or before" and "on or after" with a date field set to 3/3/2000), Replacement Part Nbr, OEM Number, and Keywords (with a note "(comma-delimited words and phrases)"). Below the search fields is another navigation bar identical to the one above. The Windows taskbar at the bottom shows the Start button and several open applications, including Microsoft Internet Explorer, USATODAY.com, and Microsoft PowerPoint.

https://www.tyadnet.tyad/SearchEstimates.asp - Microsoft Internet Explorer provided by NCMIS

File Edit View Favorites Tools Help

Back Search Favorites History

Address https://www.tyadnet.tyad/SearchEstimates.asp

**TOBYHANNA**  
ARMY DEPOT

"Communications-Electronics Logistics Center of Choice into the 21st Century"  
jckdce, estimator, 3/3/2000

Estimator Search Parts Create Project Search Projects **Search Estimates** Contact Help

Search Reset

Estimate Number:

Project:

Company:

Submitted: ☐ on or before ☒ on or after

Replacement Part Nbr:

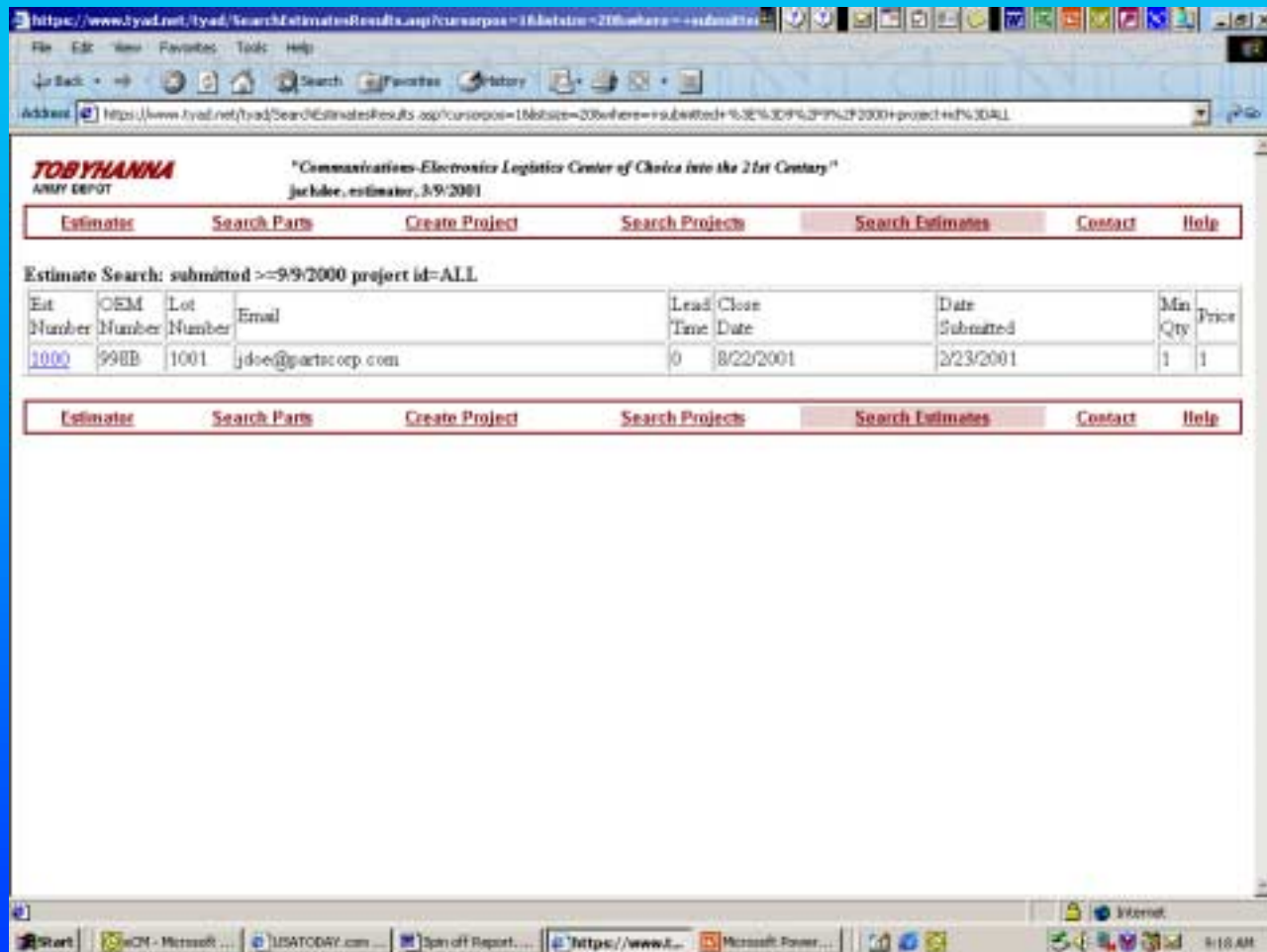
OEM Number:

Keywords:   
(comma-delimited words and phrases)

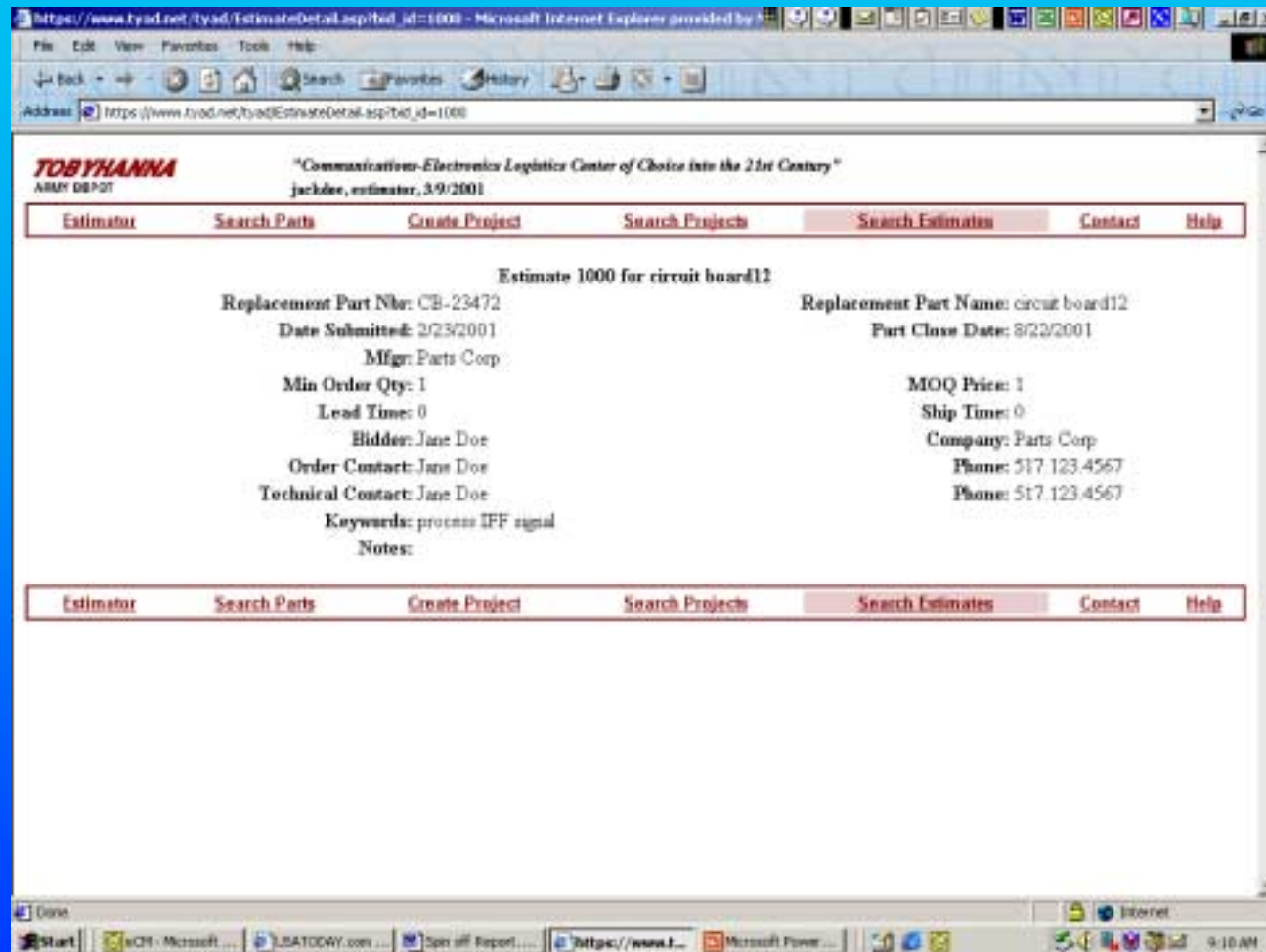
Estimator Search Parts Create Project Search Projects **Search Estimates** Contact Help

Start Microsoft Internet Explorer USATODAY.com Top of Report... https://www.t... Microsoft Power... 9:16 AM

# An Estimate Search Result



# Drill Down to Estimate Detail



# Summary

- eCM is an effective, web-based productivity improvement tool
- Now targeted to electronic systems but could also be useful for repair and maintenance of mechanical systems
- Can be integrated with other tools to, for example, provide input to procurement operations

# Extension to Other Applications

- A Phase II project formation will be necessary for extension to other services and/or applications
- The basic structure should be the same for any application but database fields may need tailoring
- NCMS seeks other ARMY, Navy, Marine, and Air Force depots for the Phase II project
- Contact Tony Haynes
  - (734) 995-4930    [tonyh@ncms.org](mailto:tonyh@ncms.org)